Toward a Universal Rule for the Reasonable Disposition of Surface Waters in California

I. INTRODUCTION

In 1994 the California Supreme Court, in *Locklin v. City of Lafayette*,[1] held that a rule of reasonableness governs uphill landowners who discharge surface water into a natural watercourse.[2] This rule eliminates the immunity previously enjoyed by such landowners.[3] In doing so, the court extended the holding of *Keys v. Romley*,[4] which imposed a rule of reasonableness on those who divert surface water from their land onto the land of another.[5]

In fashioning its rule of reasonableness, the California Supreme Court expressly considered two competing policies: 1) equity, i.e., fairness as

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1. 7 Cal. 4th 327, 867 P.2d 724, 27 Cal. Rptr. 2d 613 (1994).
2. *Id.* at 337, 867 P.2d at 728, 27 Cal. Rptr. 2d at 620. The court held:
> When alterations or improvements on upstream property discharge an increased volume of surface water into a natural watercourse, and the increased volume and/or velocity of the stream waters or the method of discharge into the watercourse causes the downstream property damage . . . a property owner . . . may be liable for that damage. The test is whether, under all the circumstances, the upper landowner's conduct was reasonable.

Id.; *see infra* note 51 and accompanying text.

3. *See* Archer v. City of Los Angeles, 19 Cal. 2d 19, 119 P.2d 1 (1941). The rule articulated in *Archer*, known as the civil law watercourse rule, insulated uphill landowners from liability for discharging water into natural watercourses, whether their actions were reasonable or not. *See infra* note 49 and accompanying text.

4. 64 Cal. 2d 396, 412 P.2d 529, 50 Cal. Rptr. 273 (1966). The court in *Keys* held: "[I]t is . . . incumbent upon every person to take reasonable care in using his property to avoid injury to adjacent property through the flow of surface waters." *Id.* at 409, 412 P.2d at 537, 50 Cal. Rptr. at 285. *See infra* notes 55-66 and accompanying text.

5. This Comment addresses only those damages caused by water. These damages generally manifest themselves as erosion to the lower landowner's property or structural damage to the buildings on the lower landowner's property due to flooding. This Comment does not address damage caused by the deposit of silt and mud on the land of the lower landowner. Such damage is governed by the law of nuisance.

between the parties, and 2) the promotion of development.[6] This Comment suggests that another policy concern, that of overall economic efficiency, should be considered on an equal footing with the first two concerns because it promotes efficient use of resources and encourages the parties to arrive at solutions that abate potential damage.[7]

This Comment further analyzes the rules announced in *Locklin* and *Keys*. Although the *Locklin* rule is described as an extension of the *Keys* rule to a similar factual scenario,[8] the two rules actually differ significantly.[9] That difference is responsible for a difference in impact on the three above-mentioned policy concerns.[10] This Comment also questions the necessity of two different rules and proposes an integrated rule that is more effective in harmonizing the three policy objectives.[11]

Part II of this Comment provides the general definitions of California water law and discusses the development of California's water discharge law doctrine up to its current position. Part III discusses and analyzes the three policy concerns previously mentioned, one of which is proposed by this author. Part IV discusses the universal rule that should be implemented so as to eliminate the differences between the *Keys* and *Locklin* rules and to synthesize the three policy concerns. Part V is a brief conclusion.

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6. *See infra* notes 79-86 and accompanying text.

7. *See infra* notes 91-105 and accompanying text. Briefly, efficient solutions decrease the social costs generated by any given problem. Rules that create bright line delimitations of rights create the appropriate incentives for parties to negotiate the most cost effective solutions to any given problem.

8. *See infra* text accompanying note 108; *see also* Locklin v. City of Lafayette, 7 Cal. 4th 327, 356, 867 P.2d 724, 752, 27 Cal. Rptr. 2d 613, 642 (1994). The court stated:

> [W]e agree with those courts which have held that *Keys v. Romley* states a rule that is applicable to all conduct by landowners in their disposition of surface water runoff whether the waters are discharged onto the land of an adjoining owner or into a natural watercourse, as well as to the conduct of upper and lower riparian owners who construct improvements in the creek itself.

Id. at 357, 867 P.2d at 752, 27 Cal. Rptr. 2d at 642.

9. *See infra* notes 109-17 and accompanying text. Briefly, the *Keys* rule dictates that when both upper and lower landowners act reasonably in discharging and receiving surface water respectively, the upper owner will be liable. The *Locklin* rule dictates that when both upper and lower landowners act reasonably in discharging and receiving surface water in a natural watercourse, the upper landowner will be immune from liability.

10. *See infra* notes 123-29 and accompanying text. Arguably, the *Locklin* rule is more effective in promoting development and leads to more equitable results than the *Keys* rule.

11. *See infra* part IV.B.

II. CALIFORNIA WATER LAW DEFINITIONS AND DEVELOPMENT

A. Definitions

To appreciate the current state of this aspect of water law, one must understand its historical roots. Water law has traditionally evaluated the rights and liabilities of property owners concerning the discharge of water by classifying the offending water as 1) surface water, 2) water flowing within a natural watercourse, or 3) flood water.[12] Consequently, it is necessary to understand how these terms are defined.

"Surface water" refers to water diffused over the surface of land or contained in depressions, and which results from rain or snow, or which rises to the surface from springs.[13] It is *not* water flowing in a fixed channel or water that has collected in a body of water such as a lake.

A "natural watercourse" is a channel, including a canyon or ravine, with a defined bed and banks made by water and habitually used by water.[14] The water must run as a collected body or stream in those seasons of the year and at those times when the streams in the region are accustomed to

12. *Locklin*, 7 Cal. 4th at 344, 867 P.2d at 734, 27 Cal. Rptr. 2d at 623. The court stated that in the "arcane area of water law under consideration in this case, the rights and liabilities of private property owners for property damage or personal injury are in large part dependent upon the classification of the water." *Id. See, e.g.*, San Gabriel V.C.C. v. Los Angeles County, 182 Cal. 392, 188 P. 554 (1920). The *San Gabriel V.C.C.* court noted that "[t]he difference between surface waters and those collected and flowing in a watercourse is well recognized, and the same rules by no means apply to one as the other." *Id.* at 398, 188 P. at 556.

13. *Locklin*, 7 Cal. 4th at 345, 867 P.2d at 736, 27 Cal. Rptr. 2d. at 627; *see San Gabriel V.C.C*, 182 Cal. at 398, 188 P. at 556 ("[Surface waters] in the legal sense are those which fall on the land by precipitation from the skies or arise in springs and spread over the surface of the ground without being collected into a definite body."); *see also* Le Brun v. Richards, 210 Cal. 308, 315, 291 P. 825, 829 (1930) ("[S]urface waters are those which are produced by rainfall, melting snow, or springs, and which in the case of the two first mentioned sources are precipitated, and in the case of the last-mentioned source, rise upon the land.").

14. *Locklin*, 7 Cal. 4th at 345, 867 P.2d at 736, 27 Cal. Rptr. 2d at 627. The watercourse in *Locklin* was the Reliez Creek, a natural watercourse that drains a watershed of approximately 2,291 acres outside of Walnut Creek, California. The creek is several miles long and runs down out of the hills to a confluence with Las Trampas Creek. *Id.* at 339, 867 P.2d at 730, 27 Cal. Rptr. 2d at 321. *See also* Youngblood v. City of Los Angeles, 160 Cal. App. 2d 481, 325 P.2d 587 (1958). Rivas Canyon and Rustic Canyon, located in the Pacific Palisades area of Los Angeles, were both found to be natural watercourses although water flows through these canyons only after rainfall. *Id*. at 485, 325 P.2d at 585.

flow.[15] The term "natural watercourse" can also include a man-made channel if such a channel has existed for a sufficient period of time,[16] but a "natural watercourse" does not include a swale, hollow, or depression through which surface waters may pass during a storm when they do not collect into a defined stream.[17] Furthermore, once "surface waters" have become part of a stream in a watercourse, they are no longer recognized as "surface waters."[18] Of course, when an extraordinary overflow of streams or rivers takes place, the overflow is known as "flood water," not "surface water" or water flowing within a "natural watercourse."[19] The remedy for

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15. *Locklin*, 7 Cal. 4th at 345, 867 P.2d at 734, 27 Cal. Rptr. 2d at 623; *see, e.g.*, Mogle v. Moore, 16 Cal. 2d 1, 104 P.2d 785 (1940). The court in *Mogle* held that a dry creek bed running alongside a road did constitute a natural watercourse. In so doing the court stated:

> West Cucamonga creek did not lose its character as a watercourse nor did its waters lose their character as stream waters after 1916, because the stream bed was dry for periods of time. It is thoroughly established in California that a constant flow of water is not essential to the existence of a watercourse. It is sufficient if, during some seasons, water does in fact flow in the stream bed.

Id. at 8, 104 P.2d at 790 (citations omitted).

16. *San Gabriel V.C.C.*, 182 Cal. at 397, 188 P. at 556. In *San Gabriel* the water channel in question was a man made storm drain constructed in 1913 which was an improvement of the natural water course that had been flowing out of the Sierra Madre Mountains and into Pasadena. The court held that the drain had "now existed for such a length of time as the channel for the natural drainage of the watershed . . . that the manner of its creation is not material, and it has all the attributes of a water channel wholly natural in its origin." *Id. See also* Los Angeles County Flood Control v. Mindlin, 106 Cal. App. 3d 698, 165 Cal. Rptr. 233 (1980). A road that had been in existence since 1919 was found to be the bank of a natural watercourse even though the road, when installed, had altered the natural flow of the Santa Clara river. *Id.*

17. *Locklin*, 7 Cal. 4th at 345, 867 P.2d at 735, 27 Cal. Rptr. 2d at 627.

18. *San Gabriel V.C.C.*, 182 Cal. at 398, 188 P. at 559; *see also supra* note 14. In *San Gabriel* the appellant argued that, under the circumstances, surface water cases controlled. The court noted:

> [T]he present case is not concerned with surface waters, and the foregoing decisions are not on point. The waters upon which the drains here in question act have lost their character as surface waters before they reach the drains and have already been gathered into a definite body flowing as a stream in a watercourse.

Id.

19. 4 B.E. WITKIN, SUMMARY OF CALIFORNIA LAW, 977 (8th ed. 1987); *see, e.g.*, Le Brun v. Richards, 210 Cal. 308, 291 P. 825 (1930). The court in *Le Brun* defined flood waters as "those which escape from a stream or other body of water and overflow the adjacent territory." *Id.* at 315, 291 P. at 829. *See also* Mogle v. Moore, 16 Cal. 2d 1, 104 P.2d 785 (1940). The court in *Mogle* stated:

> The term `flood waters' is used to indicate waters which escape from a watercourse in great volume and flow over adjoining lands in no regular channel, though the fact that such errant waters may form themselves a temporary channel or follow some natural channel, gully or depression does not affect their character as flood waters or give the course which they follow the character of a natural watercourse.

Id. at 9, 104 P.2d at 789. *But see* Costello v. Bowen, 80 Cal. App. 2d 621, 631, 182 P.2d 615, 620 (1947). The court in *Costello* stated: "Excessive storm waters which

damage caused by flood waters has been more consistent over the last hundred years than has been the remedy for damage caused by the other two forms of water;[20] but, during heavy rain, the division between the three forms of water can become obscured.[21]

B. History of California's Water Discharge Law

1. From the Common Law to the Civil Law Rule

At common law, the "common enemy doctrine" gave an owner of land over which surface water flowed unlimited leeway in discharging that surface water, whether the landowner discharged that water into a natural watercourse or onto the land of another.[22] The landowner could obstruct

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overflow the banks of a stream, but which later find their way back into the stream either by drainage or by percolation, as the stream subsides, are not deemed to be `flood waters' . . . but are considered as waters of the stream." *Id.* This Comment does not address "flood waters."

20. See 4 B.E. WITKIN, SUMMARY OF CALIFORNIA LAW 977 (8th ed. 1987), where flood waters are described as the "common enemy" of all landowners. *See also* Weinberg Co. v. Bixby, 185 Cal. 87, 95, 196 P. 25, 30 (1921). The court in *Weinberg Co.* stated:

> The doctrine of the common law relating to protection against flood overflow of rivers, and which has been adopted by the California courts, recognizes such flood waters as a common enemy which may be guarded against or warded off by one whose property is invaded or threatened, by obstructions which are merely defensive in their nature and not calculated to interfere with the current of the water in its natural channel . . . even though the result of such obstruction has been to throw an increased volume of the flood upon opposite or lower proprietors.

Id. Ostensibly, the common enemy doctrine still controls in flood water cases. Nevertheless, the protective measures must still be reasonable. *Id.* at 96, 196 P. at 30; *see also* Le Brun v. Richards, 210 Cal. 308, 291 P. 825 (1930). The court in *Le Brun* stated: "[flood waters] are regarded as `a common enemy against which every man has a right to defend himself, regardless of the fact that the barriers he erects for the protection of his land may cause the flood to rise higher, or flow with greater force upon his neighbors.'" *Id.* at 314, 291 P. at 827. *See generally* WELLS A. HUTCHINS, THE CALIFORNIA LAW OF WATER RIGHTS 28 (1956).

21. This Comment, however, does not question the rules concerning liability for the diversion of "flood waters," nor does it question at what moment "surface waters" that have entered a "natural watercourse" during heavy rain become "flood waters." But see Mogle v. Moore, 16 Cal. 2d 1, 104 P.2d 785 (1940), where "flood waters" are distinguished from "surface waters" by the fact that flood waters are those that have broken away from a stream, while surface waters are those that have yet to become part of a watercourse. *Id.* at 9, 104 P.2d at 790.

22. Town of Union v. Durkes, 38 N.J.L. 21, 22 (1875). In this New Jersey case, the court stated the common law: "[T]he diversion of surface water, even when such a

the flow of the water by turning it back or diverting it onto the land of another without liability for any damage that might result.[23] It was *damnum absque injuria*.[24] This rather harsh common law rule is no longer followed with respect to surface waters or waters flowing within a natural watercourse.[25]

Instead, more than a century ago, California adopted what is known as the civil law rule.[26] This rule gave the owner of the higher land an easement or servitude over lower parcels which allowed him to discharge surface waters, without liability, as they *naturally* flowed from his higher land onto the lower land of another.[27] The lower land owner could not obstruct the water flow[28] and had to accept it as the burden of natural

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diversion [does] a hurt to another, [is] not an actionable wrong . . . . [S]urface water [is] the common enemy, which every proprietor may fight and get rid of as best he may." *Id.*

23. *Id.* In *Town of Union*, the city graded a hillside and constructed a road. This improvement caused surface water to do damage to the land of the plaintiff "by washing away the soil." *Id.* at 21.

24. *See* BLACK'S LAW DICTIONARY 354 (5th ed. 1979). "Loss, hurt, or harm without injury in the legal sense . . . . A loss which does not give rise to an action for damages against the person causing it." *Id.*

25. *But see supra* note 20. The common enemy doctrine may still apply to extraordinary overflows of streams or rivers, i.e., flood waters.

26. Ogburn v. Connor, 46 Cal. 346 (1873). In *Ogburn*, Connor, a farmer, was the lower land owner. Ogburn, also a farmer, owned the upper land. Connor, to protect his soil from the natural surface water runoff from the Ogburn farm, built an embankment at the property line. Heavy rain fell and water collected on the Ogburn farm causing damage. The trial court held that the "common enemy" doctrine applied and denied relief to Ogburn. The Court of Appeal reversed holding:

> [T]he owner of the lower ground has no right to erect embankments whereby the natural flow of the water from the upper ground shall be stopped; nor has the owner of the upper ground a right to make any excavations or drains by which the flow of water is diverted from its natural channel and a new channel be made on the lower ground . . . .

Id. at 351.

See Le Brun v. Richards, 210 Cal. 308, 291 P. 825 (1930), for a case which applies the civil law rule to surface waters. See Archer v. City of Los Angeles, 19 Cal. 2d 19, 119 P.2d 1 (1941), for a case which applies the civil law rule to watercourses.

27. *E.g.*, *Le Brun*, 210 Cal. 308, 291 P. 825. The court stated:

> It is thoroughly settled in California that the owner of the upper or dominant estate has a legal and natural easement or servitude in the lower or servient estate to discharge all surface waters naturally falling or accumulating on his land, upon or over the land of the servient owner in the manner in which they would naturally flow from a higher to a lower level, and that the owner of the lower estate is answerable in damages for any injury which may be caused to the upper estate by reason of obstructions which he has placed in the way of such natural flow, thus causing it to back up or remain on the land of the upper proprietor.

Id. at 313, 291 P. at 828.

28. *See supra* note 26 and accompanying text.

drainage.[29] The uphill owner, however, was not permitted to gather the surface waters by artificial means and discharge them onto the lower land in greater volume or in a different manner than they would have been discharged naturally.[30] Note that with respect to "surface waters," the civil law rule, as opposed to the common law rule, exposed the upper landowner to liability and deprived him of his common law immunity.[31]

As to water flowing within a natural watercourse, however, the civil law rule differed. It solidified the upper landowner's common law immunity from liability for water discharge.[32] Nowhere is a rationale given for this

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29. *See supra* note 26 and accompanying text; *see also* Keys v. Romley, 64 Cal. 2d 396, 402, 412 P.2d 529, 532, 50 Cal. Rptr. 273, 277 (1966). The court noted that the civil law rule "finds its justification in the concept that those purchasing or otherwise acquiring land should expect and be required to accept it subject to the burdens of natural drainage." *Id.*

30. San Gabriel V.C.C. v. Los Angeles County, 182 Cal. 392, 398, 188 P. 544, 548 (1920). The court stated that as to surface waters "the [civil law] rule has been established by numerous decisions in this state that a landowner may not gather them together on his land by artificial means and discharge them onto the lower lying land in greater volume or in a different manner than they would naturally be discharged." *Id.*

See, e.g., Larrabee v. Town of Cloverdale, 131 Cal. 96, 63 P. 143 (1900). The court in *Larrabee* held an upper landowner liable for damages caused by the diversion of water that ran at the edge of a sidewalk that abutted plaintiff's property. The court found it unnecessary to determine whether the water, which ran approximately eighteen inches deep and three feet wide, constituted a natural watercourse because diversion of any kind of water (excluding flood water) from its natural drainage path gave rise to liability under the civil law rule. *Id.* at 99, 63 P. at 145.

But see Turner v. Hopper, 83 Cal. App. 2d 215, 188 P.2d 257 (1948). The court held that a defendant who reformed a swale that was 250 feet wide and turned it into a ditch that was 20 feet wide was not liable for any damage caused by surface water flowing through the ditch. The court held that the alteration was not a sufficient change in the natural conditions to warrant a cause of action. *Id.* at 218, 188 P.2d at 259. The court found that the ditch was shallower than the swale, that the water that ran through the swale usually ran through the bottom twenty feet anyway, and that the outlet for the water was in a similar location as it had been with the swale. *Id.*

31. An example may be instructive: Assume an upper landowner, the city of San Diego, builds a road with gutters designed to carry water away from its development. During a rain storm surface water is carried by the road to the downhill land of the plaintiff where it floods his house. Without the road the surface water would have flowed over the surface of the land and nowhere near plaintiff's home.

The common enemy doctrine would have immunized the city of San Diego for liability for such damage. The civil law rule would expose the city of San Diego to liability because its actions caused surface water to be gathered and discharged in a different manner than it would have naturally.

32. Locklin v. City of Lafayette, 7 Cal. 4th 327, 349, 867 P.2d 724, 738, 27 Cal. Rptr. 2d. 613, 632 (1994). The court defined the civil law rule as applied to watercourses: "[A]n upper riparian owner had the right . . . to discharge surface waters, including those whose volume was increased as a result of development which altered

difference; rather, it is deemed "well settled."[33] Under the civil law natural watercourse rule, an upper riparian[34] owner could collect or gather surface waters and discharge them into a natural watercourse at a location or locations other than those where natural runoff would normally have occurred even if that watercourse was incapable of accommodating the increased flow of water.[35] It was immaterial that the watercourse was inadequate to accommodate the increased flow,[36] or that downstream land might be flooded as a result of this increased flow, as long as the surface water was discharged into a natural watercourse.[37] Therefore, if surface waters were gathered and discharged into a stream which was part of a

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both the absorption of waters by the soil and the drainage pattern, into a natural watercourse." *Id.* *See, e.g.*, O'Hara v. Los Angeles County Flood Control Dist., 19 Cal. 2d 61, 119 P.2d 23 (1941). The plaintiff in *O'Hara* alleged that the county flood control district replaced low permeable dikes that bordered a river with certain improvements constructed for flood control. The improvements, allegedly, increased the velocity of water flowing in the river and obstructed drainage of surface waters into the river. During a rainstorm, the plaintiff's land was flooded by surface waters that could not drain into the river and by water that burst through the river banks. *Id.* at 64, 119 P.2d at 25. The court held that "[a] lower riparian owner has no redress for injury to his land caused by improvements in the stream when there has been no diversion of water out of its natural channel." *Id.* at 63, 119 P.2d at 24. Therefore, the plaintiff's complaint did not state a cause of action. *Id.*

33. *See infra* notes 35, 49, and accompanying text.

34. A riparian owner is one who owns land alongside a river. Bathgate v. Irvine, 126 Cal. 135, 58 P. 442 (1899). A river, of course, is considered a natural watercourse.

35. *Locklin*, 7 Cal. 4th at 349, 867 P.2d at 738, 27 Cal. Rptr. 2d at 632; *see, e.g.*, Deckert v. County of Riverside, 115 Cal. App. 3d 885, 171 Cal. Rptr. at 870. The court in *Deckert* held that a shopping center developer who rerouted surface water through an underground pipe that drained into a natural watercourse was not liable for the flooding that occurred to a downstream property even though the surface water flowing through the pipe added to the volume and velocity within the watercourse. *Id.* at 895, 171 Cal. Rptr. at 870. The court stated:

> These facts call into application a well settled principle of law found in the flooding cases. It is that an upper landowner who collects surface waters and discharges them into a natural watercourse, one into which such surface waters naturally drain, then the upper landowner is *not* liable to the lower landowner for any damages arising from the increased volume of water flowing in and along the natural watercourse.

Id.

36. San Gabriel V.C.C. v. Los Angeles County, 182 Cal. 392, 401, 188 P. 554, 559 (1920). "[A] riparian owner has no right to complain because the volume of water in the stream is increased by artificially draining surface waters into it above, provided only the stream is the natural drainage channel for the lands so drained." *Id.*

37. *Id.* *See, e.g.*, Youngblood v. City of Los Angeles, 160 Cal. App. 2d 481, 325 P.2d 587 (1958). The court held that a developer who subdivided uphill land was not liable for any damage below because the subdivision did not "divert the natural drainage flow at all. It merely increased and accelerated it through creating a greater runoff." *Id.* at 492, 325 P.2d at 592. *But cf.* Smith v. City of Los Angeles, 66 Cal. App. 2d 562, 153 P.2d 69 (1944). The court in *Smith* noted the civil law watercourse rule, but held that the city had not simply increased the flow within the watercourse but, rather had actually diverted the natural flow. *Id.* at 577, 153 P.2d at 82. A landowner is liable for the diversion of a natural watercourse. *Id.*

natural drainage path and those surface waters flowed to the land below only as a part of the stream, a lower landowner harmed by the addition of those surface waters could not complain.[38]

Based on this, the courts went on to say that since a riparian owner could not complain when surface waters were actually added by artificial drainage to the volume of a stream, then riparian owners could not complain about drainage improvements[39] that did not add water to the stream but merely protected the adjoining land against the water already in the stream.[40] Again, it made no difference whether the stream could accommodate any increase in the volume and velocity of water within the watercourse as a result of the improvements.[41]

The civil law watercourse rule[42] allowed the uphill riparian owner to improve the natural drainage channel at the expense of his downhill neighbor.[43] The owner could straighten the stream or improve its bed with paving, drains, or conduits. The upper landowner could also construct

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38. *See supra* note 32.

39. Improvements might include concrete embankments, bulkheads, culverts, dikes, ditches.

40. *See, e.g.*, O'Hara v. Los Angeles County Flood Control District, 19 Cal. 2d 61, 119 P.2d 23 (1941). The court held that a defendant who had replaced permeable dikes with concrete levees and concrete embankments running at right angles to the levees was not liable for the damage caused due to the increase in velocity and volume of water within the watercourse. *Id.* at 62, 119 P.2d at 24. Compare *San Gabriel V.C.C.*, 182 Cal. at 404, 188 P. at 558, where the court recognized that in some cases where the velocity and volume of water running through a stream was increased due to improvements, the activities were enjoined or damages granted. In those cases, however, "factors other than those merely of a change reasonably made for the protection of land above and having the effect only of increasing the volume and to that extent the speed and height of the water [were present]." *Id.* The court pointed in particular to a case where the increased flow might also include raw sewage or some other type of pollution. *Id.*

41. *San Gabriel V.C.C.*, 182 Cal. at 406, 188 P. at 560.

42. The civil law watercourse rule is often referred to in the case law simply as the natural watercourse rule. *See* Locklin v. City of Lafayette, 7 Cal. 4th 327, 349, 867 P.2d 724, 745, 27 Cal. Rptr. 2d. 613, 655 (1994).

43. Bauer v. County of Ventura, 45 Cal. 2d 276, 283, 289 P.2d 1, 5 (1955). In *Bauer*, the county of Ventura built a system of ditches and levees which diverted water from its natural watercourse onto Bauer's lower land. The court affirmed the civil law rule as to watercourses: "Mere improvement within an existing watercourse which accelerates rather than diverts the flow does not give rise to a cause of action when damage results from an overflow. . . . But to escape liability the improvements thus described must follow the natural drainage of the country or the natural stream." *Id.*

Here, however, the court found that liability could follow from the County's activities because it had actually altered the natural watercourse. Therefore, the court reversed the trial court's ruling sustaining the defendant's demurrer. *Id.*

dikes or bulkheads. Again, this could be done even if the result was to increase the volume and velocity of the water within the watercourse to the detriment of lower owners.[44]

Archer v. City of Los Angeles[45] solidified the civil law watercourse rule in California. In *Archer*, the plaintiff was a downhill landowner. The Archers lived on a lagoon that drained into the Pacific Ocean. The defendant uphill landowner was the City of Los Angeles.[46] In developing the uphill land, the city deepened, widened, and paved the existing natural drainage into the lagoon. The concrete improvements increased the volume and velocity of the water flowing into the lagoon.[47] Following heavy rain, the lagoon swelled, flooding the plaintiff's property up to nine feet in places. The outlet of the lagoon which led to the Pacific Ocean was not wide enough to accommodate the increased flow of water into the lagoon. In effect, the lagoon backed up.[48]

The court held that a lower landowner had no right of redress for injury caused to his land by improvements to a stream for the purpose of draining or protecting the land above.[49] The court was indifferent to the damage

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44. *Id.*

45. 19 Cal. 2d 19, 119 P.2d 1 (1941).

46. Many of the cases which arise in this context contain an inverse condemnation allegation based on Art. I Sec. 19 of the California Constitution. This Comment does not directly address that issue. The California Supreme Court, however, has stated "that a government entity may, if it acts unreasonably, be liable in inverse condemnation for damage caused by its discharge of surface water runoff from property which it improved into a natural watercourse." *Locklin*, 7 Cal. 4th at 362, 867 P.2d at 750, 27 Cal. Rptr. 2d. at 645. Thus a government entity can be found liable in inverse condemnation under either the *Keys* rule or the *Locklin* rule if its activities are unreasonable. *See also* Arvo Van Alstyne, *Inverse Condemnation: Unintended Physical Damage*, 20 HASTINGS L. J. 431, 448 (1969) (discussing the possibility of inverse condemnation in surface water and flood water cases); *cf.* Bunch v. Coachella Valley Water Dist., 214 Cal. App. 3d 203, 262 Cal. Rptr. 513 (1989) (holding that a government entity may be liable in inverse condemnation for flood control activities which result in unintended physical property damage only where there is a conjunction of substantial causation and unreasonableness).

47. *Archer*, 19 Cal. 2d at 29, 119 P.2d at 13. This occurred because the water flowed faster on the concrete and could not be absorbed into the soil. *Id.*

48. This, however, was not a flood water case. Recall that flood water cases arise when defendants have deflected floodwater from their land onto the land of another causing damage. The City of Los Angeles in *Archer* did not deflect flood water; it simply increased the flow of stream water within the natural watercourse. *Id.*

49. *Id.* at 24, 119 P.2d at 5. The court stated:

> It is established in California and other jurisdictions that a lower owner has no right of redress for injury to his land caused by improvements made in the stream for the purpose of draining or protecting the land above, even though the channel is inadequate to accommodate the increased flow of water resulting from the improvements.

Id. The court then cited *San Gabriel V.C.C. v. County of Los Angeles* as authority for its holding. *Id.*

done to the lower land.[50] This civil law rule was the law in California until the modern rule of reasonableness began to erode it.

2. The Modern Rule of Reasonableness

The modern trend in water law seems to be away from the rigidities of property law and toward the flexible standards of tort law.[51] First, the California Supreme Court instituted a rule of reasonableness to govern surface water discharge cases.[52] The court then applied a rule of reasonableness to cases involving natural watercourses.[53] Under the civil

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50. *Id.* at 25, 119 P.2d at 5. The court stated: "[T]he construction of improvements by the defendants in the instant case did not place upon them the duty of improving the outlet [of the lagoon]. They cannot be held negligent for doing what they had a right to do even though a different plan might have avoided the damage." *Id.*

51. *See Locklin*, 7 Cal. 4th 327, 351, 867 P.2d 724, 738, 27 Cal. Rptr. 2d 613, 630 (1994). The court stated:

> The modern rule governing landowner liability for surface water runoff and drainage is no longer simply a rule of property law dependent upon the existence of rights, servitudes, or easements. . . . Today a landowner's conduct in using or altering the property in a manner which affects the discharge of surface waters onto adjacent property is subject to a test of reasonableness.

Id.

The *Locklin* court then went on to extend the rule of reasonableness to watercourse cases. Compare the rule in *Locklin* with the rule in *Archer*, *supra* note 49; *see also* Keys v. Romley, 64 Cal. 2d 396, 412 P.2d 529, 50 Cal. Rptr. 273 (1966) (the court instituted the rule of reasonableness to surface water cases). *See infra* note 123 for other jurisdictions instituting the rule of reasonableness.

52. *Keys*, 64 Cal. 2d. at 409, 412 P.2d at 537, 50 Cal. Rptr. at 288; *see infra* notes 56-66 and accompanying text. Briefly, the *Keys* court held that it was "incumbent upon every person to take *reasonable care* in using his property to avoid injury to adjacent property through the flow of surface waters." *Id.* (emphasis added). The *Keys* court also stated:

> There is no question . . . that one's liability for interfering with surface waters, when incurred, is a tort liability. An unjustified invasion of a possessor's interest in the use and enjoyment of his land through the medium of surface waters, or any other type of waters, is as much a tort as a trespass or a private nuisance produced by smoke or smells.
>
> Such words as "right," "servitude," and "easement" connote a state that is fixed and definite, and they cannot be applied in those terms to describe flexible legal relations dependent upon varying circumstances . . . . [A] court is more likely to produce an acceptable result if it analyzes "prerequisites of liability" rather than merely the "rights of the parties."

Id. at 407, 412 P.2d at 536, 50 Cal. Rptr. at 286.

53. *Locklin*, 7 Cal. 4th at 337, 867 P.2d at 729, 27 Cal. Rptr. 2d at 622. The court stated:

> We conclude that Archer does not correctly state the principles presently

law rule, surface water could not be indiscriminately dumped on the land of another if not channeled into a natural watercourse.[54] The upper owner had an easement over only that portion of land through which surface water naturally drained. Since development of uphill land necessarily directed surface water in "new," i.e., unnatural, paths, this rule almost always exposed the developing uphill landowner to liability. In this way, the civil law rule created a disincentive to development, a disincentive that concerned the court.[55]

With the landmark case of *Keys v. Romley*,[56] the court altered the civil law rule. By instituting a rule of reasonableness to surface water cases, the court sought to enhance incentives to develop[57] as well as to promote equity as between the parties.[58]

In *Keys*, the Keys' were the downhill landowners. Romley leased the uphill property.[59] In 1956, Keys built an appliance store on his land and in so doing he piled a mound of loose dirt at the back of his property. In 1957, Romley graded the uphill land, built an ice rink, and paved a parking lot with asphalt. In 1958, Keys removed the loose dirt pile which abutted the Romley property. In 1959, the Keys property was flooded by "surface water" runoff from the Romley property.[60]

The court in *Keys* found that a landowner's conduct in using or altering the property in a manner which affects the discharge of surface waters onto an adjacent property is subject to a test of reasonableness:

> It is . . . incumbent upon every person *to take reasonable care* in using his property to avoid injury to adjacent property through the flow of surface waters.

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applicable to the liability of riparian owners . . . .

> When alterations or improvements on upstream property discharge an increased volume of surface water into a natural watercourse, and the increased volume and/or velocity of the stream waters or the method of discharge into the watercourse causes downstream property damage . . . a property owner may be liable for that damage. The test is whether, under all the circumstances, the upper landowner's conduct was *reasonable*.

Id. (emphasis added).

54. San Gabriel V.C.C. v. Los Angeles County, 182 Cal. 392, 398, 188 P. 544, 548 (1920); *see supra* note 30 and accompanying text.

55. Keys v. Romley, 64 Cal. 2d 396, 402, 412 P.2d 529, 533, 50 Cal. Rptr. 273, 280 (1966). The court stated: "The civil law rule, if strictly applied, admittedly has some tendency to inhibit improvement of land." *Id.*

56. 64 Cal. 2d 396, 412 P.2d 529, 50 Cal. Rptr. 273 (1966).

57. *Id.* at 409, 412 P.2d at 539, 50 Cal. Rptr. at 289. The court stated that the California rule announced in *Keys* "encourages profitable and enjoyable use of property." *Id. See also infra* note 85 and accompanying text.

58. *Id.* The court stated: "No party, whether an upper or lower landowner, may act arbitrarily and unreasonably in his relations with other landowners and still be immunized from liability." *Id.*

59. The uphill land owner was also named as a defendant, but it was Romley who actually improved the land in question thereby creating the drainage problem.

60. *Keys*, 64 Cal. 2d at 400, 412 P.2d at 530, 50 Cal. Rptr. at 275.

> Failure to exercise reasonable care may result in liability by an upper to a lower landowner. It is equally the duty of any person threatened with injury to his property by the flow of surface waters *to take reasonable precautions* to avoid or reduce any actual or potential injury.[61]

The notion of servitudes was eliminated. However, this is not a strict negligence standard.[62] This rule of reasonableness is reciprocal, and includes a balancing of the utility of the use with the actual gravity of the harm. Both lower and upper landowners are encouraged to act reasonably.[63] If the lower landowner behaves unreasonably in accepting the changed flow of water, he loses even if the changed flow was the result of unreasonable activity.[64] For example, in *Keys*, the court expressed reservations that Mr. Keys, by removing the pile of loose dirt from the back of his property, had acted unreasonably. The court posited that the dirt pile might have protected the Keys property from surface water flow

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61. *Id.* at 409, 412 P.2d at 535, 50 Cal. Rptr. at 286 (emphasis added).

62. *Cf.* Marment v. Castlewood Country Club, 30 Cal. App. 3d 483, 105 Cal. Rptr. 853 (1973). In *Marment*, the defendants installed a drainage system which picked up both surface and sub-surface water, and deposited it at the edge of plaintiff's property. Soon after, plaintiff's land began to slip, the movement ultimately resulting in substantial, if not total, loss of plaintiff's homes. The jury returned a verdict for the defendants. The Court of Appeal reversed and remanded, stating: "[T]he upper owner must act reasonably to avoid, and the lower owner to protect against, injury to the lower land through diversion of the flow of water. If both act reasonably, then the upper owner is liable." *Id.* at 485, 105 Cal. Rptr. at 855.

The Court of Appeal remanded because the trial court instructed the jury as to strict negligence accountability whereas the *Keys* rule required a test of reasonableness which weighs "the utility of the diversion against the gravity of the harm . . . ." *Id.*

63. *See, e.g.*, Pagliotti v. Acquistapace, 64 Cal. 2d 873, 412 P.2d 538, 50 Cal. Rptr. 282 (1966). The court found that an uphill owner who constructed 48 apartment units on his property and who paved a parking area such that natural surface water flow was altered had acted reasonably because the uphill owner had no alternative means of disposing of his surface water. At the same time, in accordance with *Keys*, the court remanded the case for a determination of the reasonableness of the lower landowner who had erected a dam to stop the surface waters from entering her property. *Id.*

64. This result is implicit in the *Keys* decision. The *Keys* rule requires an inquiry into the reasonableness of uphill as well as downhill landowners. *See Keys*, 64 Cal. 2d at 409, 412 P.2d at 536-37, 50 Cal. Rptr. at 280-81. If the uphill landowner's liability was contingent on his unreasonable, i.e., negligent conduct alone, an inquiry into the reasonableness of the downhill owner would be unnecessary. In this way, the rule functions much the same as a contributory negligence rule would.

from the Romley property.[65] Accordingly, the court remanded the case for a finding on the issue of reasonableness.[66]

The *Keys* rule, when it was announced, applied only to surface water cases. As to watercourse cases, the civil law watercourse rule was still being followed.[67] Case law, however, slowly evolved to also apply a rule of reasonableness to watercourse situations.[68] In *Ektelon v. City of San Diego*,[69] a private developer and the City of San Diego altered uphill land by making various improvements to the natural drainage system. This increased the velocity and volume of flow within the watercourse and caused damage to the downstream landowners.[70] These facts are analogous to *Archer*,[71] but the court did not follow the rule announced in *Archer*. Rather, the court held that *Keys* had created "a broad rule of reasonableness to be applied to all factual situations."[72] The *Ektelon* court went on to say that "[a]n upstream landowner has no absolute right to protect his land from floodwaters by constructing structures which increase the downstream flow of water into its natural watercourse, but is instead

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65. *Id.* at 411, 412 P.2d at 537, 50 Cal. Rptr. at 288. "The injuries complained of only began to occur here after plaintiffs removed the dirt pile from the rear of their property and the defendants changed the contours of their own property. These acts must be weighed, and the court should make a finding on the issue of reasonableness." *Id.*

66. *Id.*

67. *See, e.g.*, Deckert v. County of Riverside, 115 Cal. App. 3d 885, 171 Cal. Rptr. 865 (1981) (applying the civil law watercourse rule in 1981, fifteen years after the imposition of the rule of reasonableness in *Keys*).

68. *See, e.g.*, Martinson v. Hughey, 199 Cal. App. 3d 318, 244 Cal. Rptr. 795 (1988). Martinson was the upper landowner. Hughey was the lower landowner. A drainage ditch ran along the border of Martinson's property and emptied into a ditch running along the northern border of Hughey's property. Martinson deepened and widened the ditch within his property that fed the ditch that ran along Hughey's property. Hughey began to obstruct the ditch with dirt, debris, tires and concrete pieces, complaining that the improvements had caused an increased flow of water which he did not have to accept. The drainage water backed up and damaged some of the trees on the Martinson land. Rather than applying the civil law watercourse rule and finding Martinson within his right for deepening and widening the ditch, the court followed the rule of reasonableness outlined in *Keys* to determine whether the parties had acted reasonably. The court determined that Martinson's actions were reasonable and that Hughey's were not. *See also* Weaver v. Bishop 206 Cal. App. 3d 1351, 254 Cal. Rptr. 425 (1988). Bishop constructed a riprap along a stream bank to stop the erosion of his property. This in turn caused more erosion to occur to the Weaver property which was on the other side of the stream. Weaver said that Bishop had actually diverted the watercourse and was automatically liable. The court found that Bishop had simply improved the watercourse and therefore liability would turn on the reasonableness of the parties.

69. 200 Cal. App. 3d 804, 246 Cal. Rptr. 483 (1988).

70. Id. at 807, 246 Cal. Rptr. at 484.

71. *See supra* notes 45-50 and accompanying text.

72. *Ektelon*, 200 Cal. App. 3d at 808, 246 Cal. Rptr. at 486.

governed by the ordinary principles of negligence."[73] As this trend picked up momentum, the definitional differences between surface waters and waters flowing through a natural watercourse seemed to be abandoned.[74] Finally, the California Supreme Court officially extended the rule of reasonableness followed in cases such as *Ektelon* to the watercourse scenario.[75]

In *Locklin v. City of Lafayette*, Harry Locklin was the downhill plaintiff. Locklin lived along a creek. The City of Lafayette and several private developers made various improvements[76] to the creek bed, thereby increasing the velocity and volume of water within it. This increase in velocity and volume of water caused a steady erosion of Locklin's property. The court agreed with *Ektelon* and overruled *Archer*.[77] In doing so the court stated: "There is no exception to the rule of reasonableness for riparians. No logic would support such a distinction and we decline to recognize one."[78]

Thus, under the current state of the law in this area, the *Keys* rule applies in surface water cases, and the *Locklin* rule applies in watercourse cases.

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73. *Id.* at 810, 246 Cal. Rptr. at 487.

74. 5 HARRY D. MILLER & MARVIN B. STARR, CURRENT LAW OF CALIFORNIA REAL ESTATE § 14:23, at 357 (2d ed. 1989). The author stated:

> It seems reasonable to assume the former . . . rule applicable to the use of natural watercourses has been modified by the `reasonable use' test applicable to surface waters. With the introduction of this test there is no longer any valid reason for distinguishing between surface waters and those that flow through a natural watercourse with respect to the rights and obligations of the respective property owners.

Id.

75. Locklin v. City of Lafayette, 7 Cal. 4th 327, 357, 867 P.2d 724, 742, 27 Cal. Rptr. 2d 613, 631 (1994).

76. *Id.* at 341, 867 P.2d at 731, 27 Cal. Rptr. 2d at 620. These improvements included paving the stream bed, building concrete embankments for flood control, and inserting concrete culverts in the stream bed. *Id.*

77. *Id.* at 337, 867 P.2d at 730, 27 Cal. Rptr. 2d at 623. See the text accompanying note 2, *supra*, for the holding of *Locklin*; *see also supra* note 51. The court also stated: "Since there was no issue involving unreasonable conduct in draining surface waters into the stream bed in *Archer*, that decision also fails to support a conclusion that immunity exists regardless of whether the upstream owner acted reasonably." *Id.* at 347, 867 P.2d at 735, 27 Cal. Rptr. 2d at 624 (internal citations omitted).

78. *Id.* at 357, 867 P.2d at 742, 27 Cal. Rptr. 2d at 631.

III. THE THREE POLICY CONCERNS

In moving to the rule of reasonableness, courts have attempted to balance two conflicting policies: maintaining the incentive to develop uphill land while insuring the downhill landowner's right to compensation for damage to his land caused by the uphill development. There is, however, a third policy concern that warrants the court's attention: the promotion of overall economic efficiency.

The parties should be encouraged in all cases to seek the most cost efficient solutions to any problem causing damage. The cost efficient solution conserves resources and often results in prophylactic measures. This Comment suggests that parties should be given the proper incentives to abate potential damage when it is less expensive to do so, and that the rules espoused in *Keys* and *Locklin* may fail to provide such an incentive.

A. Incentive to Develop

For the last one hundred years, the courts have been unequivocal about their desire to promote development in the area of water flow law.[79] The early rules covering the runoff of surface waters onto adjacent property and into natural watercourses were, in fact, designed to accommodate "progression from a rural, agricultural society to gradual urbanization."[80] Originally, the common law "common enemy doctrine" granted uphill owners total immunity from liability regardless of how they discharged water or how the discharged water was classified. This rule allowed uphill landowners to develop without restriction.

The civil law natural watercourse rule was a pro-development rule as well.[81] In fact, as discussed above it had two aspects. The first allowed uphill owners to gather as much surface water as they wanted and to discharge it into natural watercourses without repercussion. The second allowed uphill owners to improve drainage by constructing embankments on dikes within the boundaries of the actual watercourse even if those

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79. *See, e.g.*, Locklin, 7 Cal. 4th 327, 867 P.2d 724, 27 Cal. Rptr. 2d 613 (1994); Keys v. Romley, 64 Cal 2d. 396, 412 P.2d 529, 50 Cal. Rptr. 273 (1966); Archer v. City of Los Angeles, 19 Cal. 2d. 19, 119 P.2d 1 (1941); O'Hara v. Los Angeles County Flood Control Dist., 19 Cal. 2d. 61, 119 P.2d 23 (1941); San Gabriel V.C.C. v. Los Angeles, 182 Cal. 392, 188 P. 554 (1920); Larrabee v. Town of Cloverdale, 131 Cal. 96, 63 P. 143 (1900).

80. *Locklin*, 7 Cal. 4th at 351, 867 P.2d at 737, 27 Cal. Rptr. 2d at 627.

81. *Archer*, 19 Cal. 2d at 27, 119 P.2d at 6. The court stated: "Not to permit an upper landowner to protect his land against the stream would be in many instances to destroy the possibility of making the land available for improvement or settlement and condemn it to sterility and vacancy." *Id.* (quoting San Gabriel V.C.C. v. Los Angeles County, 182 Cal. 392, 401, 188 P. 554, 588 (1920)).

improvements increased the velocity and volume of the water within the watercourse to the detriment of the lower landowners. Both of these aspects of the watercourse rule were designed to facilitate the development of upstream properties.[82]

The civil law surface water rule, however, worked in reverse by exposing upper landowners to absolute liability for non-natural discharges of surface water.[83] It was a potential disincentive to development. The *Keys* rule of reasonableness in effect tilted the scales away from automatic compensation for damaged lower landowners.[84] This result was more amenable to development.[85] The theory, of course, has always been that by eliminating, or at least decreasing, the probability of liability for

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82. *Locklin*, 7 Cal. 4th at 351, 867 P.2d at 738, 27 Cal. Rptr. 2d at 627. The court stated:

> [T]he natural watercourse rule has two aspects. The first permits the riparian landowner to gather surface waters and discharge them into the watercourse at a location other than that at which natural drainage would occur. The second permits the owner to make improvements in the bed of the stream to improve drainage and to protect the land from erosion by constructing dikes or embankments even though the result may be increased flow and velocity which might damage the property of lower riparian owners. Both aspects of the rule have as their purpose facilitating the development of upstream properties.

Id.

83. *Keys*, 64 Cal. 2d at 402, 412 P.2d at 532, 50 Cal. Rptr. at 277. The court noted that "[t]he civil law rule, if strictly applied, admittedly has some tendency to inhibit improvement of land, since almost any use of the property is likely to cause a change in the natural drainage which may justify complaint by an adjoining landowner." *Id.*

84. *See supra* notes 61-64 and accompanying text. The court in *Keys* stated: "It is equally the duty of any person threatened with injury to his property by the flow of surface waters to take reasonable precautions to avoid or reduce any actual or potential injury." *Keys*, 64 Cal. 2d at 409, 412 P.2d at 536, 50 Cal. Rptr. at 281.

85. The *Keys* court also reasoned that because the utility of the possessor's use of the land was entered into the reasonableness calculus and balanced against the harm caused by that use, truly meritorious uphill development would not be significantly deterred. *Id.* at 410, 412 P.2d at 537, 50 Cal. Rptr. 281. The court stated:

> The gravity of the harm is its seriousness from an objective viewpoint, while the utility of conduct is its meritoriousness from the same viewpoint. If the weight is on the side of him who alters the natural [flow of water], then he has acted reasonably and without liability; if the harm to the lower landowner is unreasonably severe, then the economic costs incident to the expulsion of surface waters must be borne by the upper owner whose development caused the damage.

Id. (internal citation omitted)

damaging water flow caused by uphill development, that that very development would be encouraged.[86]

B. Downhill Landowner's Right to Compensation

More important than development, however, was that each property owner be encouraged to act reasonably with respect to one another, and that equitable results follow damage.[87] The *Keys* court stated that the issues to be contemplated should arise under tort law rather than under property law[88] because tort law afforded more flexibility on a case by case basis and avoided the often harsh results of the civil law rule.[89] To the

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86. *Locklin*, 7 Cal. 4th at 360, 867 P.2d at 744, 27 Cal. Rptr. 2d at 633. The court stated:

> The purpose of both the civil law rule creating immunity for damage caused by surface water runoff onto adjacent property and the natural watercourse rule which imposed the burden of damage caused by upstream development on the downstream owner was to ensure that development of property would not be foreclosed by imposition of liability for damage caused by changes in the treatment of surface water occasioned by development. *Keys v. Romley* and the application of the rule of reasonableness to natural watercourses further that purpose. The rules applicable to surface water runoff onto adjacent property or into a natural watercourse have been modified only by limiting the immunity created by the civil and common law rules to conduct that is reasonable.

Id.

87. *Keys*, 64 Cal. 2d at 409, 412 P.2d at 537, 50 Cal. Rptr. at 281. The court stated: "It is . . . incumbent upon every person to take reasonable care in using his property to avoid injury to adjacent property through the flow of surface waters. Failure to exercise reasonable care may result in liability by an upper to a lower landowner." *Id.*

88. *Id.* at 407, 412 P.2d at 536, 50 Cal. Rptr. at 280. The court stated:

> It has generally been assumed heretofore that the rules relative to surface waters are a branch of property law. This classification undoubtedly results from the fact that most controversies over private waters arise between adjoining landowners and nearly always involve invasions of interests in land rather than interests in personalty or chattels. The consequence is that the legal relations of the parties have been stated almost invariably in terms of property concepts, such as rights, privileges, servitudes, natural easements, etc.

Id.

The court went on to conclude that "one's liability for interfering with surface waters . . . is a tort liability." *Id.*

89. *Id.* at 407, 412 P.2d at 535, 50 Cal. Rptr. at 279. The court stated: "[T]he civil law rule . . . may be unnecessarily rigid and occasionally unjust, particularly in heavily developed areas. It places the entire liability for damages on one owner on the basis of the unvarying formula that he who changes conditions is liable." *Id.* The court went on to say:

> But no rule can be applied by a court of justice with utter disregard for the peculiar facts and circumstances of the parties and properties involved. No party, whether upper or lower landowner, may act arbitrarily and unreasonably in his relations with other landowners and still be immunized from all liability.

Keys court, a pro-development policy was not so compelling as to warrant a complete immunity from liability for uphill landowners.[90] It seems that it was more important that the results of any given case be fair and equitable.

C. The Promotion of Overall Economic Efficiency

There is yet another policy concern which merits attention. That policy is the promotion of overall economic efficiency.[91] At times this policy concern actually seems implicit in the court's decisions,[92] but no court in this arena has expressly announced its importance. Nevertheless, courts should desire to promote solutions that do not waste resources. The least expensive remedy to a situation is, by definition, the most efficient. Perhaps more importantly, the least expensive remedy often turns out to be a prophylactic measure. Thus, the efficient remedy, which results in the

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Id. at 408, 412 P.2d at 535, 50 Cal. Rptr. at 280.

90. The *Keys* court, though taking notice of this possible disincentive, noted:

> No documentation has been produced to establish that the [civil law] rule has in fact impeded urban development in the state. A number of highly urbanized states follow the rule, and California's phenomenal growth rate, to which no one can be oblivious and of which this court may take judicial notice, appears unstunted by the existence and application of the civil law rule since 1873.

Id. at 406, 50 Cal. Rptr. at 279, 412 P.2d at 535.

91. *See generally* A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS (2d ed. 1989). For purposes of this Comment, efficiency will refer to the

> relationship between the aggregate benefits of a situation and the aggregate costs of the situation . . . . [E]fficiency corresponds to `the size of the pie,' while equity has to do with how it is sliced. Economists traditionally concentrate on how to maximize the size of the pie, leaving to others . . . the decision [of] how to divide it.

Id. at 7 (citations omitted).

92. As will be discussed, the promotion of economic efficiency is fostered by a clear delimitation of rights and a predictable outcome. *See infra* note 104 and accompanying text. The *Keys* court noted that "[the civil law rule] has the advantage that rights thereunder are readily predictable, and thus tends to avoid the contests likely to occur under [other rules]." *Keys*, 64 Cal. 2d at 402, 412 P.2d at 532, 50 Cal. Rptr. at 279.

The *Keys* court also noted that a rule of reasonableness avoids "the harsh results which occasionally may be reached under extreme applications of the other rules; but since the rights of the parties are ordinarily regarded as involving issues of fact for the jury, the predictability of result under the other rules may be lost." *Id.* at 403, 412 P.2d at 533, 50 Cal. Rptr. at 277. *See generally* RONALD H. COASE, THE FIRM, THE MARKET, AND THE LAW (1988).

least cost to society,[93] often eliminates the possibility of injury altogether.[94] The parties should be encouraged to seek such efficient solutions. A broad rule of reasonableness, such as that announced in *Keys* or *Locklin*, may fail to provide the incentive to do so.[95]

To create the proper incentives for parties to seek efficient solutions, the most effective approach is the imposition of a bright line rule.[96] A hypothetical will be instructive:[97] Suppose a private developer desired to improve ten acres of land which straddled a drainage basin. Before the improvements, water had flowed through the basin year round as a stream, but it flowed slowly and was never a threat to downhill property, even during heavy rain. After receiving approval from the city, the developer graded the ten acres, poured foundations, paved streets, and in anticipation of an increased need for drainage for her development, widened the existing stream and poured concrete embankments for three hundred yards on either side of the stream to facilitate it.

After a steady rain during the winter following completion of the developer's project, a property one mile down the drainage basin that was built along the stream was inundated, sustaining a total of $120,000 in damages. The stream below the portion which the developer widened and reinforced was not adequate to handle the increased velocity and flow of water caused by the uphill development.[98] Further, it has been discovered that by removing the concrete embankments, the velocity and flow will decrease such that damage will be negligible. The cost of removal is estimated at $80,000.[99]

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93. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF THE LAW 7 (3d ed. 1986). The author points out that a "social cost diminishes the wealth of society," i.e., reduces the size of the pie, whereas "a private cost merely rearranges that wealth," i.e., alters the size of the slices while leaving the overall size of the pie intact. *Id.*

94. Damages might also include psychological and emotional injuries which are not as easily quantifiable or recompensable; a downhill land owner might be trapped in his home, or at least, lose items in his home that have great sentimental value, as the house fills with water from a river that did not have the capacity to hold the increase in flow caused by the uphill landowner's development.

95. *See infra* notes 106-07 and accompanying text.

96. This idea is often referred to as the Coase Theorem: If there are zero transaction costs, the efficient outcome will occur regardless of the choice of legal rule as long as the outcome is readily predictable. *See* A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 12 (2d ed. 1989).

97. The hypothetical is a watercourse hypothetical. It should be noted that the logic would be the same if the hypothetical laid out a surface water fact pattern.

98. As noted, an uphill development like this causes an increased flow of water because a hard surface like concrete placed in the stream bed makes it more difficult, if not impossible, for water to be absorbed into the ground. Furthermore, smooth concrete also causes the water to flow more quickly because it is unimpeded.

99. Further assume that removal of the concrete would not adversely affect the developer's project.

If an unrestricted right to develop exists, i.e., a bright line rule, the downhill landowner has two choices after paying to remedy the initial damage:[100] 1) risk paying $120,000 to clean up an equivalent mess the next time, or 2) pay the developer between $80,000 and $120,000 to remove the concrete embankment and the problem.[101] The logical and economically efficient solution would be to pay the developer to remove the embankment. On the other hand, if the developer is absolutely liable for the damage she causes,[102] the outcome will be no different.[103] Because the developer knows she must compensate the lower landowner for any future damage she causes, she is given an incentive to seek the least expensive solution. Here, she would pay for the removal of the embankment.

Thus, if a bright line rule exists, and is known to the parties, economically efficient decision making should take place maximizing wealth by keeping costs to a minimum.[104] This might have the actual effect of rearranging the rights as delineated by the courts, but as long as an economically efficient solution is reached, this should not matter. The economic problem in all cases, posits Ronald Coase, is how to maximize value, not to determine who is right and who is wrong.[105]

Unfortunately, at least from the economist's viewpoint, the courts have expressly moved away from such bright line rules in an attempt to promote equity, fairness, and reasonableness.[106] The rule of reasonableness is not

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100. It is important to note that this analysis assumes that transaction costs do not exist.

101. This assumes that the downhill landowner can, in fact, afford all of this. It may be that the downhill owner for our purposes turns out to be the downhill owner's insurance carrier.

102. It is more likely the uphill landowner's insurance carrier will be making these payments, but this should not alter the calculus. The insurance carrier simply steps into the shoes of the uphill (or downhill) landowner.

103. Again, this analysis assumes that transactions costs do not exist.

104. COASE, *supra* note 92, at 119. The author states: "[I]f market transactions were costless, all that matters (questions of equity apart) is that the rights of the various parties should be well defined and the results of legal actions easy to forecast." *Id.*

105. *Id.* at 114. The author states: "It is always possible to modify by transactions on the market the initial legal delimitation of rights. And, of course, if such market transactions are costless, such a rearrangement of rights will always take place if it would lead to an increase in the value of production." *Id.*

106. Keys v. Romley, 64 Cal. 2d 396, 409, 412 P.2d 529, 537, 50 Cal. Rptr. 273, 281 (1966). The *Romley* court stated:

> Our [civil law] rule has the advantage of predictability, in that responsibility for diversion of surface waters is fixed, all things being relatively equal. On the other hand, we cannot permit certainty of liability to be an excuse for

a bright line rule which clearly delineates the rights and responsibilities of the respective parties; rather, it creates uncertain questions of fact.[107]

IV. TOWARD A UNIVERSAL RULE

The *Locklin* court asserted, in extending the *Keys* rule to watercourse cases, that the rules governing surface water cases and natural watercourse cases should be merged because no plausible distinction can be made distinguishing the two factual scenarios.[108] Nevertheless, as will be seen, the rules still differ, and each has a different impact on the three policy concerns. Ironically, the difference in the rules is based upon the distinction between surface water and water running in a natural watercourse.[109] This Comment argues, as the *Locklin* court rightly stated, the distinction between surface water and water flowing within a natural watercourse should not exist, and that the rules should be effectively merged into a universal rule governing all factual scenarios.

As will be demonstrated, the *Locklin* rule promotes the stated policy objectives more effectively than the *Keys* rule. This Comment recommends that the *Keys* rule should be disregarded and that the *Locklin* rule should be adopted for all factual scenarios. This Comment also suggests that the *Locklin* rule be altered such that liability for damage caused by the unreasonable discharge of water onto the land of another be *joint and several* liability. Joint and several liability may replace some of the incentive for uphill defendants to seek economically efficient solutions to the problems they create.

A. The Locklin and Keys Rules and Their Differences

The two rules are reciprocal. As stated above, the *Keys* court announced that it would not tolerate unreasonable conduct by landowners.[110] To counter such immunized and unreasonable conduct, the *Keys* court altered the civil law surface water rule[111] in an effort to protect upper landowners

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> tolerating unreasonable conduct by any landowners in modern society, whether they be upper or lower, urban or rural.

Id.

107. *See supra* note 92 and accompanying text.

108. *See infra* notes 117-22 and accompanying text.

109. *See supra* part II.

110. *Keys*, 64 Cal. 2d at 409, 412 P.2d at 536, 50 Cal. Rptr. at 280. The court stated: "No party, whether an upper or a lower landowner, may act arbitrarily or unreasonably in his relations with other landowners and still be immunized from all liability." *Id.*

111. Recall that the civil law surface water rule imposed absolute liability on an uphill landowner for any "unnatural" discharge of surface water onto the land of another.

from the unreasonable conduct of lower landowners.[112] Concurrently, this rule had the effect of promoting development. Thus, under the *Keys* rule today, as opposed to the outmoded civil law surface water rule, an upper landowner is shielded from liability when a lower landowner acts unreasonably. This same result, unsurprisingly, is also reached under the *Locklin* rule.

What happens, however, if both uphill and downhill landowners act reasonably? Under the *Keys* rule, the reasonable uphill landowner is liable.[113] Under the *Locklin* rule, the reasonable uphill landowner is *not* liable.[114] Curiously, in reaching the opposite results, both the *Locklin* court and the *Keys* court reverted to the civil law rule for guidance.[115] When both parties are reasonable under the *Keys* rule, the upper landowner is liable as he would have been under the civil law surface water rule. When both parties are reasonable under the *Locklin* rule, the upper landowner is immune from liability as he would have been under the civil law watercourse rule. The difference in the outcome, then, rests on the fact that the civil law rule, as discussed in Section II,[116] treated surface water cases

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112. *Keys*, 64 Cal. 2d at 408, 412 P.2d at 536, 50 Cal. Rptr. at 280. The court stated: "[T]he traditional civil law rule . . . has been accepted as the basis for harmonious relations between neighboring landowners for the past century. But no rule can be applied by a court of justice with utter disregard for the peculiar facts and circumstances of the parties and properties involved." *Id.*

113. *Id.* at 409, 412 P. 2d at 537, 50 Cal. Rptr. at 280. The *Keys* court stated: "If the actions of both the upper and lower landowners are reasonable, necessary, and generally in accord with the foregoing, then the injury must necessarily be borne by the upper landowner who changes a natural system of drainage, in accordance with our traditional civil law rule." *Id.*

114. Locklin v. City of Lafayette, 7 Cal. 4th 327, 360, 867 P.2d 724, 744, 27 Cal. Rptr. 2d 613, 633 (1994). The court stated, "[I]f the upper [land]owner acts reasonably . . . the lower riparian [land]owner must continue to accept the burden of damage caused by the stream water." *Id.*

115. In *Keys*, the court stated: "If the actions of both the upper and lower landowners are reasonable, necessary, and generally in accord with the foregoing, then the injury must necessarily be born by the upper landowner who changes a natural system of drainage, *in accordance with our traditional civil law rule.*" *See Keys*, 64 Cal. 2d at 409, 412 P.2d at 537, 50 Cal. Rptr. at 273 (emphasis added). In *Locklin*, the court stated, "[T]he `well settled civil law rule' dictates a different result for riparian owners than that applicable to upland owners . . . . The result will differ in disputes between riparian owners, each of whom had acted reasonably." *Locklin*, 7 Cal. 4th at 360, 867 P.2d at 744, 27 Cal. Rptr. 2d at 633.

116. *See supra* note 26-50 and accompanying text.

differently from watercourse cases. Oddly, this was a distinction the very same court in *Locklin* stated could not be made and did not exist.[117]

The *Locklin* court stated that property owners could not disregard the impact of their conduct whether they lived upstream or upslope.[118] It referred to a "nationwide trend" toward a merger of the rules governing diffused surface water and those governing watercourses.[119] In fact, the *Locklin* court noted that the authority on which the court in *Keys* relied in establishing the surface water rule of reasonableness was a watercourse case, not a surface water case.[120]

Similarly, the court in *Ektelon* stated the *Keys* decision created a broad rule of reasonableness to be applied to all factual situations.[121] The

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117. It may be that the court recognized the shortcomings inherent in the *Keys* rule and attempted to mitigate them with its approach in *Locklin*. The court could not abrogate *Keys* on the facts before it in *Locklin*, but one wonders whether, with the opportunity, the court might do just that.

118. *Locklin*, 7 Cal. 4th at 353, 867 P.2d at 740, 27 Cal. Rptr. 2d at 629. The court stated:

> Defendants, who assume that *Keys v. Romley* . . . does not apply to discharge of surface water into a natural watercourse or to improvements in a natural watercourse, offer no justification, other than the fact that they might incur liability, for recognizing a distinction between the duty of a riparian property owner to avoid injury to downstream property owners, and the duty of an uphill owner to downhill owners. We do not share the assumption that either a private or public property owner may disregard the impact of its conduct on the other properties whether those properties are downstream or downslope.

Id. (citation omitted).

119. *Id.* at 356, 867 P.2d at 742, 27 Cal. Rptr. 2d at 631. The court stated: "Weaver v. Bishop, Ektelon v. City of San Diego, and Martinson v. Hughey, . . . reflect the nationwide trend toward merger of the rules governing diffused surface water and those governing watercourses." *Id.* (citing A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 305(1), at 3-14 - 3-15 (1993) (citations omitted).

120. *Id.* at 356, 867 P.2d at 742, 27 Cal. Rptr. 2d at 631; *see* Armstrong v. Francis Corp., 120 A.2d 4 (N.J. 1956). The New Jersey Supreme Court concluded: "Social progress and wellbeing are in actuality better served by a just and right balancing of the competing interests according to the general principles of fairness and common sense which attend the application of the rule of reason." *Id.* at 10.

121. Ektelon v. City of San Diego, 200 Cal. App. 3d 804, 808, 246 Cal. Rptr. 483 (1988). The court stated: "The court in *Keys*, after an extensive review of water law, postulated a broad rule of reasonableness to be applied to *all factual situations*." *Id.* (emphasis added). *See also* Martinson v. Hughey, 199 Cal. App. 3d 318, 244 Cal. Rptr. 795 (1988) (assuming that reasonableness applied to natural watercourse cases); Weaver v. Bishop, 206 Cal. App. 3d 1351, 254 Cal Rptr. 425 (1988). The court in *Weaver* held that neither the natural watercourse rule giving uphill owners absolute immunity for improving a natural watercourse nor the "common enemy doctrine" which both fall under the rubric *damnum absque injuria* should be applicable. *Id.* at 1357, 254 Cal. Rptr. at 431. The court stated:

> [The notion of harm without legal injury is] peculiar to water law [and rests] on the `generally perceived reasonableness' of actions taken to protect one's property and on a policy of encouraging the preservation of land resources. However the nearly unanimous trend has been away from per se rules based on categorical judgments of `generally perceived reasonableness,' and toward

conclusion reached by the *Locklin* court in extending the *Keys* rule to the natural watercourse case was this:

> [W]e agree with those courts which have held that *Keys v. Romley* states a rule that is applicable to all conduct by landowners in their disposition of surface water runoff whether the waters are discharged onto the land of an adjoining owner or into a natural watercourse, as well as to the conduct of upper and lower riparian owners who construct improvements in the creek itself . . . .
>
> There is no exception from the rule of reasonableness for riparians. No logic would support such a distinction and we decline to recognize one.[122]

It is odd then, considering this trend toward a "merger" of the rules based on the principles of tort law and no difference between the factual situations that, in California, the rules pertaining to the two situations continue to differ. More peculiar is that this difference is based on arcane principles of property law.

B. The Locklin Rule Should Prevail—Serving Policy Concerns

A look at the differing rules indicates that the *Locklin* rule serves the two stated policy concerns of the court more effectively than the *Keys* rule. As to economic efficiency, the rules perform roughly the same. Therefore, the *Locklin* rule should supplant the *Keys* rule in all situations.

The *Locklin* rule more effectively promotes development. Because a *reasonable* uphill landowner can be found liable under the *Keys* rule, the *Keys* rule actually retains a portion of the absolute liability component that the old civil law surface water rule contained. The potential for absolute liability engendered by the *Keys* rule can be a formidable disincentive to development. On the other hand, under the *Locklin* rule, an uphill landowner can rely on her reasonable conduct to insulate her from liability. Like the *Locklin* rule, the rule of reasonableness as adopted in other jurisdictions immunizes the reasonable uphill owner even in surface water

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> fact-based determinations of reasonableness in the particular circumstances of each case.

Id. (citation omitted).

122. *Locklin*, 7 Cal. 4th at 357, 867 P.2d at 742, 27 Cal. Rptr. 2d at 631. The court also stated: "[A]lthough *Keys v. Romley* was decided in the context of damage caused to adjacent land by the discharge of surface waters, the reasoning of the court has broader applicability." *Id.*

cases.[123] The *Locklin* rule serves to more effectively enhance the incentive to develop by eliminating the possibility of absolute liability.

The *Locklin* rule is arguably more equitable and more reasonable than the *Keys* rule as well. The *Keys* rule and the civil law rule might reflect an effort by the courts to create an incentive for uphill landowners to discharge surface waters into natural drainage paths.[124] This theory might reconcile the difference between these rules. Nevertheless, today, if the two stated goals of the court are equity as between the parties and the promotion of development, it follows that developers should be able to arrange for drainage from their land in any manner they wish, so long as the drainage plan is reasonable. Restriction of an uphill landowner's ability to discharge water reasonably from her land seems inherently unfair and is a disincentive to development.

Thus, not only does the *Locklin* rule more effectively enhance the incentive to develop, it arguably leads to more equitable results. Expanding the *Locklin* approach to surface water cases and abandoning the *Keys* rule would cure the inconsistencies of the civil law rule.

On the other hand, the *Keys* rule might be seen as closer to the bright line rule sought by economists to promote efficient decision-making. In fact, the *Keys* rule might create an incentive for uphill owners to seek economically efficient solutions to potential problems since the specter of absolute liability exists. However, because damages are several under either the *Keys* rule or the *Locklin* rule, this incentive is drastically undercut.[125] The *Locklin* court held that an uphill landowner could only be found liable for that portion of the increased flow in a watercourse caused by his actions.[126] It is implicit in the *Keys* decision that damages be

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123. *E.g.*, Heins Implement Co. v. Missouri Highway & Transp. Comm'n, 859 S.W.2d 681 (Mo. 1993). The Missouri court stated that the thrust of the rule of reasonableness is that "each possessor is privileged to make a reasonable use of his land, even though the flow of surface waters is altered thereby and causes some harm to others, but incurs liability when his harmful interference . . . is unreasonable." *Id.* at 689 (citing Armstrong v. Francis Corp., 120 A.2d 4, 8 (N.J. 1956)). *See also* Peterson v. Town of Oxford, 459 A.2d 100 (Conn. 1983). The Connecticut court stated that the rule of reasonableness "permits the cost of land development to be allocated to the developer rather than the adjoining landowners" when the developer's actions are *unreasonable*. *Id.* at 103.

124. The courts, however, are silent on this point.

125. *See infra* note 134-37 and accompanying text.

126. *Locklin*, 7 Cal. 4th at 360, 867 P.2d at 744, 27 Cal. Rptr. 2d at 633. The court stated:

> An owner in the lower reaches of a natural watercourse whose conduct has a relatively minor impact on the stream flow in comparison with the combined effect of actions by owners in the upper reaches of the watercourse may not be held liable for any damage caused by the stream flow beyond the proportion attributable to such conduct.

Id.

apportioned as well.[127] Since many properties drain into any single watershed or onto any single downhill property, the *Locklin* court posited that liability would generally be spread among many defendants with no single defendant drawing an unwieldy burden.[128] Because the cost of liability would most likely be small per defendant, the *Locklin* court reasoned that the possibility of such liability would not create a disincentive to development.[129] Severability of damages, however, as will be shown, also diminishes the incentive for uphill defendants to seek efficient solutions. Thus, neither the *Keys* rule nor the *Locklin* rule provide a particularly effective incentive for defendants to make economically efficient decisions.

Economic efficiency, as discussed earlier, is best served by a bright line rule under which the parties can easily determine at the outset who will be liable for the costs of damage.[130] The economist would prefer to let the developers develop without restriction, or make them pay for whatever damage they cause. The economist is indifferent between the two possibilities and cares only that a nebulous rule, such as the rule of reasonableness, not be imposed.

The common law "common enemy doctrine" was such a bright line rule.[131] Likewise, the civil law watercourse rule immunized uphill landowners from liability for adding water to a watercourse or improving

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127. When damages are divisible in California, they are apportioned. *See infra* notes 140-41 and accompanying text.

128. *Locklin*, 7 Cal. 4th at 338, 867 P.2d at 729, 27 Cal. Rptr. 2d at 632. The court stated:

> [B]ecause the development of any property in the watershed of a natural watercourse may add additional runoff to the stream, all of which may contribute to downstream damage, it would be unjust to impose liability on an owner for the damage attributable in part to runoff from property owned by others. Therefore, an owner who is found to have acted unreasonably and to have thereby caused damage to downstream property, is liable only for the proportion of the damage attributable to his conduct.

Id.

129. *Id.* at 360, 867 P.2d at 744, 27 Cal. Rptr. 2d at 633. The court reasoned:

> If the rule were otherwise, owners at the lowest reaches of a watercourse could preclude development of upstream property by imposing on a single upstream owner the cost of all damage caused by the addition of surface water runoff if that addition combined with the existing stream flow damaged the lowest properties.

Id.

130. *See supra* notes 96-107 and accompanying text.

131. *See supra* note 20 and accompanying text. Briefly, recall that the common enemy doctrine gives a landowner the absolute right to repel water from his land.

the watercourse itself. In this way the downhill owner was given an incentive to negotiate a solution that would be more cost efficient than actual payment of the total amount of damage.[132] The cost efficient solution is an overall economic benefit to society because it conserves resources and allows them to be channeled into more productive areas.[133] Therefore, cost efficient solutions should be promoted.

The *Locklin* rule, however, undercuts the incentive to negotiate for a cost efficient solution. First, it is a rule of reasonableness which creates a question of fact to be determined on a case by case basis. Since neither party is sure who will be liable for the costs of damage, neither party is given an incentive to expend resources remedying the situation beforehand. Second, even though the rule attempts to shift liability to the unreasonable uphill owner, that same unreasonable owner can escape liability provided the downhill owner is unreasonable as well. In this way, the rule functions like a contributory negligence rule.

This contributory negligence aspect of the rule alters the calculus of the uphill owner and creates an even greater disincentive for the uphill owner to seek efficient remedies because even though the uphill owner may have acted unreasonably, by convincing a trier of fact that the downhill landowner acted unreasonably as well, the uphill owner can escape liability altogether. Whereas under the common law rule, or the civil law rule, the land owners knew who would be responsible for the costs of damage, the *Locklin* rule is not so clear.

Nevertheless, it could be argued that a rule of reasonableness, in fact, creates an incentive for the parties to act carefully, and that careful activity from the outset heads off injury in the future. The incentive to act carefully is created because a court at any time could determine that the respective activities of either party are unreasonable. The parties, under a rule of reasonableness, do not know where they stand. Thus, careful activity from the outset lessens the possibility of liability. "Careful" activity, however, does not necessarily lead to the efficient solution. When damages are less expensive than "careful" activity, the efficient solution becomes payment of damages.

Regardless, severability of damages under the *Locklin* rule undercuts the incentive to act carefully as well. Under the *Locklin* rule, a court is instructed to apportion the damages in any given case.[134] Any given

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132. See *supra* notes 100-01 and the accompanying text where the hypothetical demonstrates that the economically efficient solution was abatement for $80,000, rather than clean up for $120,000.

133. *See supra* note 91-94 and accompanying text.

134. It should be noted that multiple defendants are probably not as likely in the surface water scenario, which usually involves only two properties, as it would be in the watercourse scenario where properties for several miles might be affected.

defendant's portion of liability will most likely be small compared with the costs of being "careful." In this way, the *Locklin* rule functions similarly to comparative negligence regarding its effect on the incentive to seek efficient solutions.[135]

Returning to the hypothetical:[136] again, assume that the cost of damage is around $120,000, and the cost of abatement is approximately $80,000. If either owner knows he will be responsible for the cost of cleanup, i.e., $120,000, then the logical thing to do would be to seek a less expensive alternative. In this case, either party would choose to abate the problem for $80,000. This is the efficient solution. If we operated under a true comparative negligence regime (let us assume fault is apportioned 50% to lower owner, and 50% to upper owner), the most either would have to pay if damage occurred would be $60,000. The incentive to choose the efficient $80,000 solution is eliminated, and $40,000 (the difference between $120,000 and $80,000) is lost to society.

Similar to the comparative negligence regime, under the *Locklin* rule, a defendant's share of damages will generally be somewhat less than the total. If several developments lie along a watercourse and a remote downhill owner is damaged, the possibility exists that many of the uphill owners will be partially responsible for the damage. If there are ten defendants and each one is ten percent responsible, then in our hypothetical, each defendant will be responsible for $12,000 in damages. Certainly no single defendant would have an incentive to seek the economically efficient $80,000 solution,[137] and transaction costs would most likely eliminate the possibility that the ten defendants could share the cost of the $80,000 solution. The *Locklin* rule should be altered to create such an incentive.

C. The Need For Joint and Several Liability

Joint and several liability among defendants may provide the appropriate incentive for defendants who have acted unreasonably to seek cost efficient

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135. This does not imply that courts will apportion damages between plaintiffs and defendants in these cases as they would in actual comparative negligence cases. It simply means that in these cases there are generally multiple defendants each partially responsible for the damage such that liability is spread among various parties. The *Keys* rule suffers from the same problem.

136. Again, this hypothetical assumes that transaction costs do not exist.

137. *See infra* notes 151-55 and accompanying text, discussing the effect of transaction costs on negotiations for efficient solutions.

solutions.[138] At common law, liability against joint tortfeasors was joint and several.[139] Today, in California, the courts have retained the ability to impose joint and several liability in appropriate situations.[140] However, the law has moved toward a policy of severing damages when an actor's contribution to the harm is divisible.[141] The holding in *Locklin* makes it clear that the court believed damages of the sort under consideration here to be divisible and therefore subject to apportionment.

Nevertheless, joint and several liability under these circumstances may still be appropriate. Joint and several liability went out of favor at the same time comparative negligence swept tort law.[142] Prior to the advent of comparative negligence in California, the courts would not allocate responsibility among defendants.[143] It has been argued that prior to *Li v. Yellow Cab*,[144] "the doctrine of contributory negligence cast a moral stone against the `guilty' tortfeasor by the completely `innocent' plaintiff."[145] Since only a morally blameless plaintiff could recover, defendants could not complain when damages were not apportioned.[146] The courts would not "permit an innocent plaintiff to suffer as against a wrongdoing

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138. Note that joint and several liability would not impose on a defendant liability for damage which was innocently caused, i.e., damage that occurred naturally. Only damage attributable to culpable activity is compensable.

139. WILLIAM L. PROSSER, HANDBOOK OF THE LAW OF TORTS § 47 (4th ed. 1971).

140. *See* American Motorcycle v. Superior Court, 20 Cal. 3d 578, 586 578 P.2d 899, 903, 146 Cal. Rptr. 182, 186 (1978); *see also* United States v. Imperial Irrigation Dist., 799 F. Supp. 1052, 1069 (S.D. Cal. 1992) (applying California law and holding that "multiple tortfeasors are jointly liable only where they contribute to an indivisible injury").

141. *See* CAL. CIV. CODE § 1431 (Deering 1986 and Supp. 1992). In the realm of tort law, the Fair Responsibility Act of 1986 (known as the deep pocket initiative) effectively retained joint and several liability for economic damages, but made liability for non-economic damages several. *Id.* § 1431.2.

Restatement (Second) of Torts section 433A(1) states: "Damages for harm are to be apportioned among two or more causes where (a) there are distinct harms, or (b) there is a reasonable basis for determining the contribution of each cause to a single harm." RESTATEMENT (SECOND) OF TORTS § 433A (1979).

In addition, section 881 states: "If two or more persons, acting independently, tortiously cause distinct harms or a single harm for which there is a reasonable basis for division according to the contribution of each, each is subject to liability only for the portions of the total harm that he has himself caused." RESTATEMENT (SECOND) OF TORTS § 881 (1979).

142. *See generally* Erwin E. Adler, *Allocation of Responsibility After* American Motorcycle v. Superior Court, 6 PEPP. L. REV. 1 (1978); Li v. Yellow Cab, 13 Cal. 3d 804, 532 P.2d 1226, 119 Cal. Rptr. 858 (1975) (instituting comparative negligence in the state of California).

143. Adler, *supra* note 142, at 15; *see, e.g.*, Finnegan v. Royal Realty Co., 35 Cal. 2d 409, 434, 218 P.2d 17, 32 (1950).

144. 13 Cal. 3d 804, 532 P.2d 1226, 119 Cal. Rptr. 858 (1975).

145. Adler, *supra* note 142, at 15.

146. *Id.* at 18

defendant."[147] Today, however, com- parative negligence does exist in California, and plaintiffs no longer need to be morally blameless to recover for their injuries. Therefore, the "innocent plaintiff" justification no longer exists for holding one defendant responsible for the entire burden of an accident when the plaintiff may have, in fact, contributed to his own injury.[148]

Water law, however, has not gone as far as *Li v. Yellow Cab* in applying tort law principles. The *Locklin* rule is actually analogous to the pre-*Li v. Yellow Cab* contributory negligence regime rather than the post-*Li* comparative negligence regime which is in place today in California.[149] In the *Locklin* realm, the moral impetus still exists to favor the "innocent" plaintiff.

Joint and several liability, in this arena, is also desirable for three other reasons. First, as mentioned above, joint and several liability would create an incentive for defendants to seek economically efficient solutions to avoid joint liability. Second, joint and several liability imposed upon this class of defendants in this situation would help to minimize the impact of transaction costs. And third, joint and several liability is necessary to shift the scales of equity back toward compensating reasonable downhill plaintiffs.

Joint and several liability re-establishes some of the incentive for the unreasonable defendant to seek economically efficient solutions because it eliminates the comparative negligence problem.[150] A single uphill defendant could be held responsible for the entire judgment. Returning to the previous hypothetical, a defendant in this situation would be responsible for $120,000 although he may have only caused $12,000 worth of damage. In this way, the incentive for this defendant to seek the $80,000 solution is replaced.

Imposing joint and several liability on this class of defendants is appropriate because it helps diminish the effects of transaction costs. Until now, this analysis has assumed that transaction costs do not exist. This is helpful to the analysis, but not realistic. Courts seeking to further economic efficiency should be sensitive to transaction costs in fashioning

147. *Finnegan*, 35 Cal. 2d at 434, 218 P.2d at 32.
148. Adler, *supra* note 142, at 18. Professor Adler also notes: "Fairness dictates that the blameworthiness of all actors in an incident be treated on a consistent basis." *Id.* at 15.
149. *See supra* note 143.
150. *See supra* note 137 accompanying text.

their rules.[151] Transaction costs do exist, and they can be quite large.[152] When transaction costs added to the cost of a potentially efficient solution exceed the cost of damage, then the "efficient" solution is no longer efficient.[153] Thus, where there are positive transaction costs, the efficient outcome may not occur even under the brightest of bright line rules. Therefore, "in these circumstances, the preferred legal rule is the rule that minimizes the effects of transaction costs."[154]

An economist might insist that these uphill landowners be held absolutely liable for their actions because absolute liability imposed on this class of defendants would minimize transaction costs.[155] The California Supreme Court, however, deferring to its pro-development policy and its desire to encourage and reward reasonable behavior, would most likely shy away from such a harsh outcome—no matter how efficient it may be.[156]

However, when defendants are found to have acted unreasonably, joint and several liability would be a step in an efficient direction. As noted above, the *Locklin* rule appropriately imposes liability on the unreasonable defendant when the plaintiff has been reasonable. This result, coupled with joint and several liability, would place liability for the entire judgment on the party who would most likely require the least amount of negotiating

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151. *Cf.* COASE, *supra* note 92, at 132. The author states:

> [T]he problem which we face in dealing with actions which have harmful effects is not simply one of restraining those responsible for them. What has to be decided is whether the gain from preventing the harm is greater than the loss which would be suffered elsewhere as a result of stopping the action which produced the harm. In a world in which there are costs of rearranging the rights established by the legal system, the courts, in cases relating to nuisance, are, in effect, making a decision on the economic problem and determining how resources are to be employed.

Id.

152. *Id.* at 114. Coase states:

> In order to carry out a market transaction, it is necessary to discover who it is that one wishes to deal with, to inform [the] people that one wishes to deal [with] and on what terms, to conduct negotiations leading up to [the] bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on.

Id.

153. *See* POLINSKY, *supra* note 91, at 12; *see also* COASE, *supra* note 92.

154. POLINSKY, *supra* note 91, at 13. The author further states that the effects referred to include the effects of actually incurred transaction costs as well as "the inefficient choices induced by a desire to avoid transaction costs." *Id.*

Returning to the hypothetical, an example of an inefficient choice induced by the desire to avoid transaction costs would be, assuming an unrestricted right to develop, a downhill landowner simply paying $120,000 because the cost of negotiating with the uphill landowner for removal of the concrete embankments would most likely exceed $40,000.

155. Transaction costs would be minimized because uphill owners under these circumstances are usually in a position to remedy the situation unilaterally.

156. *See supra* note 89 and accompanying text.

to abate the problem,[157] and the party who arguably has the most resources. These cases usually involve municipalities or large developer defendants against individual property owner plaintiffs.[158] The uphill defendants are usually in a better position to take the prophylactic measures necessary, when efficient, to head off damage.[159] Joint and several liability eliminates the need for these defendants to negotiate amongst themselves for the efficient solution; rather, any single defendant likely to be pursued by the plaintiff for the full amount of the judgment, i.e., the defendant with the most resources, will be given an incentive to seek a solution independent of the other defendants.

Furthermore, joint and several liability, arguably, leads to more equitable results overall. As to the downhill landowner, the *Locklin* rule eliminates the protection of the *Keys* rule whereby absolute liability flows to the uphill owner when both parties act reasonably.[160] As suggested by this Comment, the *Locklin* rule should subsume the *Keys* rule in all factual scenarios. This result would promote development, but potentially at the expense of reasonable downhill landowners. Joint and several liability would tilt the scales back slightly in favor of the reasonable downhill landowner by helping to ensure compensation for unreasonable damage to such a downhill landowner's property.

At the same time, development should not be severely retarded by the imposition of joint and several liability on defendants in these cases. In

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157. This is because the downhill owner will most likely agree to whatever remedial measures the uphill owner takes. Whereas if liability were reversed, a downhill owner might have to engage in lengthy negotiations with an uphill owner to alter the uphill developer's plan of development to abate the problem.

158. *E.g.*, Locklin v. City of Lafayette, 7 Cal. 4th 327, 867 P.2d 724, 27 Cal. Rptr. 2d 613 (1994); Bauer v. County of Ventura, 45 Cal. 2d 276, 289 P.2d 1 (1955); Archer v. City of Los Angeles, 19 Cal. 2d 19, 119 P.2d 1 (1941); O'Hara v. Los Angeles County Flood Dist., 19 Cal. 2d 61, 119 P.2d 23 (1941); San Gabriel v. Los Angeles County, 182 Cal. 392, 188 P. 554 (1920); Larrabee v. Town of Cloverdale, 131 Cal. 96, 63 P. 143 (1900); Ektelon v. City of San Diego, 200 Cal. App. 3d 804, 246 Cal. Rptr. 483 (1988); Deckert v. County of Riverside, 115 Cal. App. 3d 885, 171 Cal. Rptr. 865 (1981).

159. In this context, joint and several liability would increase the pressure to find an efficient solution on those not only with the deepest pockets, but on those aware of the potential danger to begin with. A downhill landowner may have no idea what the impact of development five miles up a watercourse may be on her property. Further, she may not even know that the development is taking place. It is desirable to place as much pressure on the uphill developers, who are often the only parties aware of the potential dangers, to act reasonably, efficiently, and prophylactically.

160. *See supra* notes 113-14 and accompanying text.

theory, uphill owners who are forced to pay for more than their share of damage for any given accident should still be able to look to their co-defendants for indemnity or contribution.[161]

A rule that takes all of the policy concerns into consideration is one that encourages the parties to act reasonably so that damage is averted,[162] is one that does not place a undue burden of liability on reasonable uphill landowners such that development is curtailed, and is one that compensates a reasonable plaintiff for his unreasonable losses. The *Locklin* rule, coupled with joint and several liability goes the farthest in achieving the desired result. The *Locklin* rule imposes no liability on an upstream owner who acts reasonably.[163] This promotes reasonable development. The rule also eliminates the right of redress for a downstream owner who acts unreasonably.[164] This too promotes development, and discourages unreasonable behavior. These two aspects of the *Locklin* rule tilt the scales in favor of the uphill developer. Joint and several liability would help to insure that downhill landowners are compensated for any unreasonable losses they sustain. This is an equitable result. Joint and several liability would also provide an incentive for potential defendants to seek cost efficient solutions that avoid accidents.

V. CONCLUSION

Ironically, in announcing a merger of the rules governing water flow law, the California Supreme Court in *Locklin* seems to have done the opposite. Although the definitional differences between surface water, water flowing within a natural watercourse, and flood water seem to have been "abandoned" by the courts, as a practical matter it is incumbent upon the practitioner to ascertain which kind of water he or she is dealing with

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161. As Restatement (Second) of Torts section 886A states: "[W]hen two or more persons become liable in tort to the same person for the same harm, there is a right of contribution among them . . . ." RESTATEMENT (SECOND) OF TORTS § 886A (1979).
Further, it is not unprecedented for contribution among co-defendants to be judicially adopted. *See* HENRY WOODS, COMPARATIVE FAULT 255 (2d ed. 1987).

162. The prophylactic activity of the uphill owner should be included in the reasonableness calculation. Some courts expressly include the prophylactic actions of the uphill owner in their reasonableness calculations. *See, e.g.*, Martin v. Weckerly, 364 N.W.2d 93 (N.D. 1985). The court stated: "[D]rainage of surface waters complies with the reasonable-use rule: . . . (b) If reasonable care be taken to avoid unnecessary injury to the land receiving the burden . . . ." *Id.* at 95.

163. Locklin v. City of Lafayette, 7 Cal. 4th 327, 360, 867 P.2d 724, 744, 27 Cal. Rptr. 2d 613, 633 (1994). The court stated: "[I]f the upper landowner acts reasonably . . . the lower riparian owner must continue to accept the burden of damage caused by the stream water." *Id.*

164. *Id.* The court stated: "[I]f the lower owner has not acted reasonably to protect his property, the lower owner must continue to accept the burden of the damage caused by the stream water." *Id.*

because, in reality, three different rules still apply to the three different situations.

The California Supreme Court should adopt a rule for both surface water and watercourse cases similar to that announced in the *Locklin* decision, but should also modify that rule by imposing joint and several liability among the various co-defendants. By doing this, the court could achieve a net increase in the promotion of the three policy objectives outlined above, and, in fact, merge the rules governing surface waters and waters flowing within a natural watercourse.

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